

PATENT ABSTRACTS OF JAPAN

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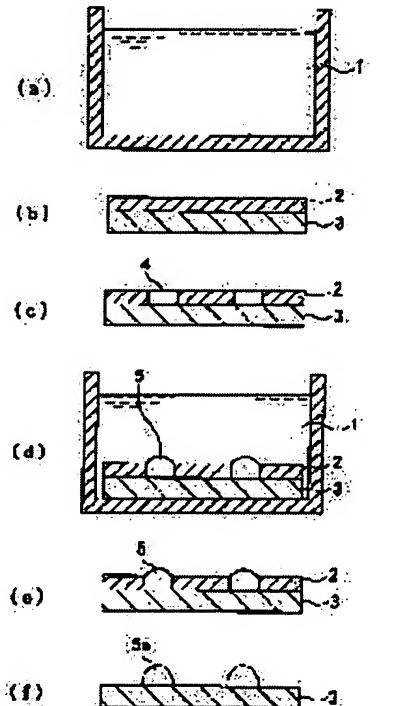
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(54) METHOD OF PRODUCING OPTICAL ELEMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To easily produce an optical element having a desired shape such as a micro lens by a sol-gel method.

SOLUTION: An organic silicon resin coating film 2 consisting of polysilane is formed on a glass substrate 3 and the coating film 2 is irradiated with an ultraviolet-ray through a mask forming a pattern having openings corresponding to those at lens areas of micro lenses to produce. Thereafter, the glass substrate 3 is immersed into a gelled silica 1, thereupon the gelled silica 1 bulges spherically and selectively at the irradiated area of the coating film 2 and adheres to the coating film 2. The gelled silica 1 is then heated and solidified and the organic silica gelled resin coating film 2 of the part free from adhesion of the gelled silica is removed by an organic solvent, and thereafter the gelled silica is further heated at 300-500°C to release absorbed water, hydrates, and combined water, and thus a transparent lens is obtained.



LEGAL STATUS

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